Missouri Statewide Health Information Exchange

Business & Technical Operations Workgroup

Additional Materials
December 15, 2009

MANATT HEALTH SOLUTIONS

Use Case Straw Concepts

Next Steps: Possible Use Case Contents

- **Clearly identify the target user(s)**
  - Most likely need to do one for each target, e. g. patient, clinician, etc.
- **Highlight the critical features of the experience that creates value for the user**
  - Benefits are not enough, think personal ROI for the user
- **Compare to the prior (current) state**
  - Make sure to articulate any extra effort/hassle involved to get to this new world

Next Steps: HIE Service Use Cases

- **Define level of detail**
  - Don't need full formal (ONC) use cases for Strategic Plan
- **Convene teams**
- **Define Timelines and Dependencies**
- **Need to work closely with Technical Infrastructure WG**
- **Leverage Existing Materials**
  - From HIOs in MO
  - From other efforts: HIOs, States, ONC

Next Steps: Possible Use Case Contents

- **Give the reader the feel of the new system from perspective of the target user, evoke the vision of the new environment**
- **Simplest approach: write a DILO (day in life of) target user in new environment**
- **Three presentation options**
  - Text
  - Pictures/text: a classic 'storyboard' like those used in media production
  - Interactive demo – SW is cheap and easy – just do it

HIE Service Evaluation Detail for ePrescribing

Defining E-Prescribing

Electronic prescribing (e-prescribing or eRx):

E-prescribing means the transmission, using electronic media, of prescription or prescription-related information between a prescriber, dispenser, pharmacy benefit manager, or health plan, either directly or through an intermediary, including an e-prescribing network. E-prescribing includes, but is not limited to two-way transmissions between the point of care and the dispenser.

Centers for Medicare & Medicaid Services. 42 CFR Part 423.

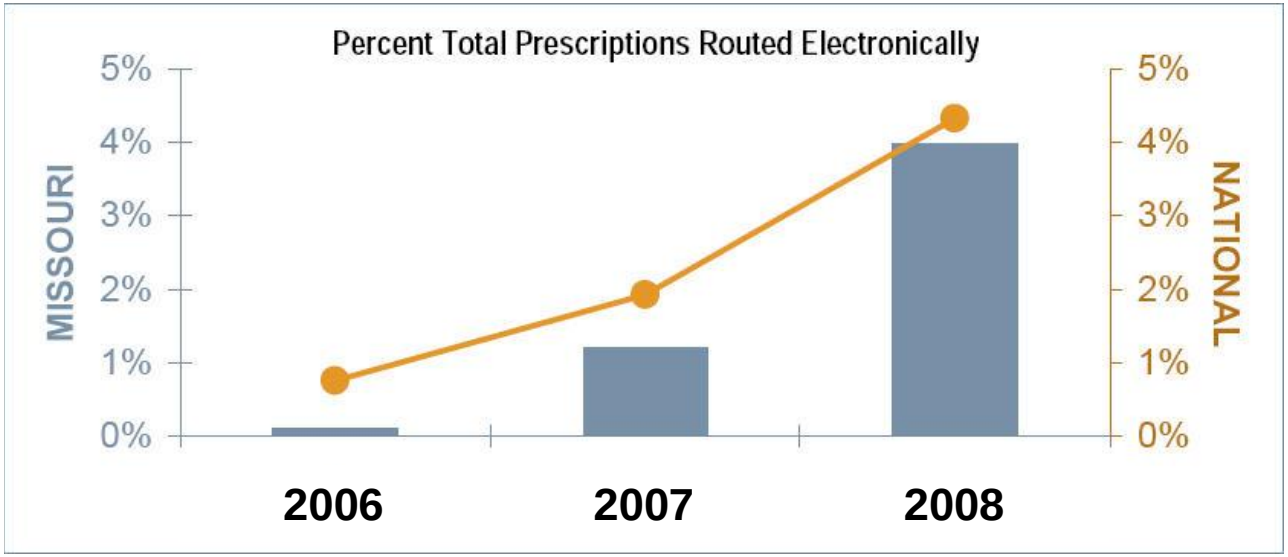
Key clinical functions include:

- Electronic prescription order captures: Searchable medication list, instructions for patients, prescriber signature, number of authorized refills, DAW (dispense as written) or substitution permitted field, prescriber comments to pharmacist, and PRN (as-needed) field.
- Health plan information: Member eligibility, applicable formulary and corresponding prior authorization requirements, and medication history.
- Connectivity: Infrastructure connecting the e-prescribing device to local pharmacies and PBMs.
- Decision Support: Clinical alerts based on the patient's demographics and medical history may include drug-drug interaction, drug allergies, age-specific warnings, and dose adjustments based on patient weight, etc.

E-Prescribing in Missouri

- **MO HealthNet:** E-prescribing and refill requests are available now through a Surescripts certified portion of CyberAccess©. Formulary information is available currently in CyberAccess©. Class one alerts are currently available in CyberAccess©.

- **Surescripts:** In 2008, 3.97% of all prescriptions were transmitted electronically, representing more than a 100% increase in prescriptions transmitted electronically in 2007. The number of Missouri physicians routing prescriptions electronically also more than doubled with 1,389 physicians routing e-prescriptions in 2008, representing a 176% growth since 2007.



Surescripts. State Progress Report on E-Prescribing: Missouri. Data as of December 31, 2008. Available at: http://www.surescripts.net/e-prescribing-statistics-charts.aspx?name=MO2009. Accessed on October 1, 2009.

Benefits of E-Prescribing

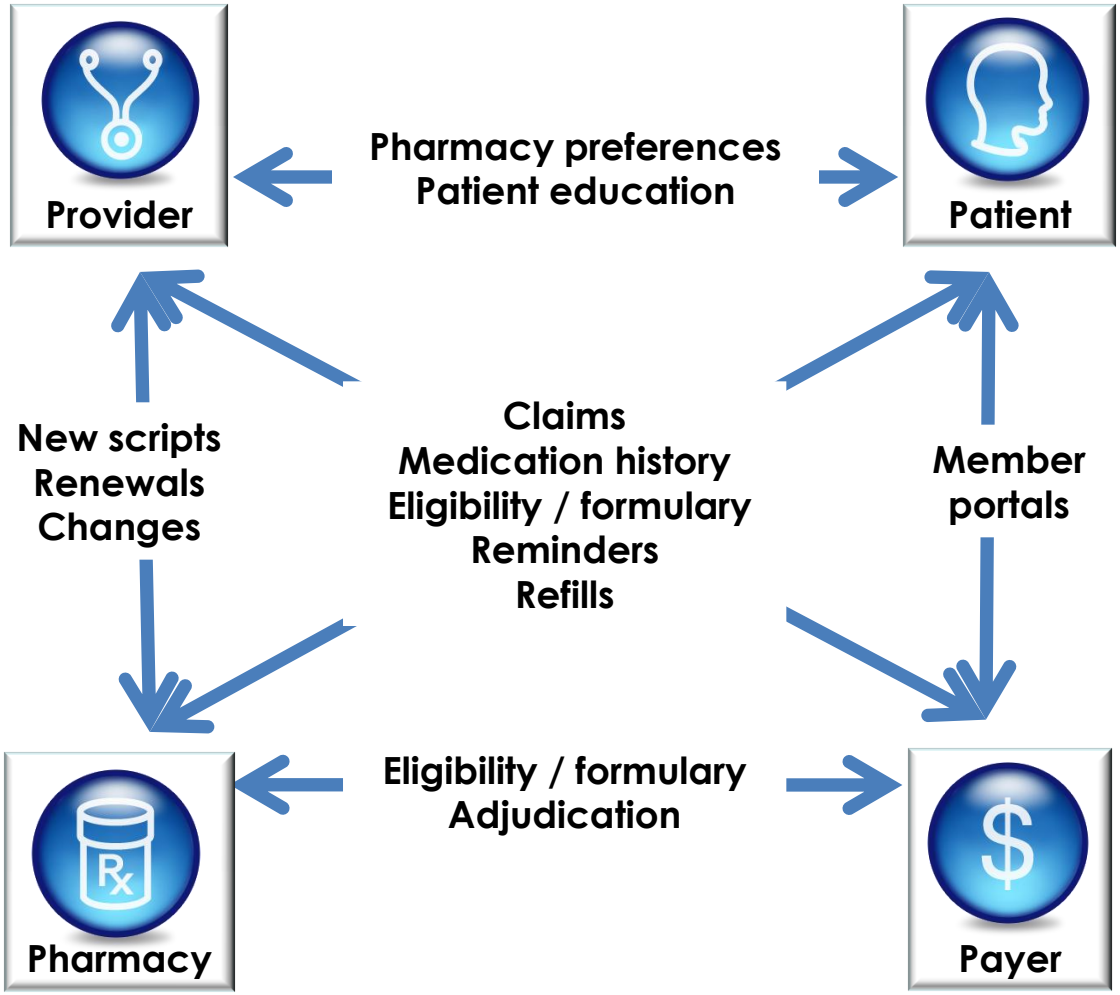
Patients	▪ Improved patient safety ▪ Patients' pharmacy benefits checked before patient arrives at pharmacy ▪ Possible cost savings from change to generic medications and immediate receipt of co-payment information ▪ Increased patient education about drug therapies

Physicians	▪ Overall improved quality of care
	  ▪ Prescriptions checked for drug-drug and drug-allergy interactions
	  ▪ Access to information for patient care management
	▪ Time savings and improved workflow
	  ▪ Fewer callbacks from pharmacies
	▪ Possible "trickle-down" savings to physician groups through formulary compliance
	▪ Increased patient satisfaction = increased provider job satisfaction

Health Plans	▪ Reduced medical errors ▪ Increased Formulary compliance decreases drug costs (e.g. through increased GUR) ▪ Greater convenience to patients = increased patient satisfaction ▪ Prescribing data to inform/improve medical and formulary management
PBMs	▪ Improved formulary from access to prescriber data ▪ Increased cost savings from formulary compliance

Pharmacists	▪ Time savings due to
	  ▪ Improved legibility
	  ▪ Prescriber access to patient formulary and medication alerts
	▪ Greater convenience and patient satisfaction = improved pharmacist satisfaction

E-Prescribing Dependencies



Source: Adapted from Prematics, Inc. July, 2008

Challenges to E-Prescribing Adoption

Challenge	Background
Cost of Adoption	• Cost may include licensing, practice management interfaces, customization, training, maintenance, and upgrades • Initial and ongoing costs exceed financial benefit to physician user • Productivity may decrease during the initial adoption phase
Change Management and Workflow Impact	• Physicians and staff may be resistant to change or technology averse • Practices often lack adequate resources to support workflow planning changes • Significant operational modifications are key to realizing value of eRx technology • Regular tasks require additional time during initial implementation
Technology	• Vendor selection, negotiation, and implementation are overwhelming, confusing • Practices struggle between selection of an EHR or eRx system • eRx IT requirements may be in conflict with current hospital infrastructure
Pharmacy, Payer/PBM Connectivity	• Physicians maintain paper workflow for non-connected pharmacies • Not all payer/PBM formulary, eligibility, or medication history is accessible yet
Medication History and Medication Reconciliation	• Information available in eRx tool may not be comprehensive or accurate • eRx tool must be able to reconcile medication histories from multiple sources
Standards and Controlled Substances	• eRx standards still under review by CMS and have not been finalized • Physicians must maintain paper workflow to prescribe controlled substances until DEA ban is lifted

HIE Service Evaluation Summaries for non-ePrescribing Services

Funding Opportunity Announcement Requirements – HIE Services

Technical Infrastructure – Develop or facilitate the creation of a statewide technical infrastructure that supports statewide HIE. While states may prioritize among these HIE services according to its needs, HIE services to be developed include:

- Electronic eligibility and claims transactions
- Electronic prescribing and refill requests
- Electronic clinical laboratory ordering and results delivery
- Electronic public health reporting (i.e., immunizations, notifiable laboratory results)
- Quality reporting
- Prescription fill status and/or medication fill history
- Clinical summary exchange for care coordination and patient engagement

How do we prioritize among these services?

Electronic Eligibility & Claims Transactions

- **MO HealthNet**
  - Over 13,000 users representing providers treating over 82% of Medicaid participants have been trained on the CyberAccess© web portal.
  - Since October 1, 2009 prescription and medical encounter claims data for all 850,000 MO HealthNet participants has been available via CyberAccess©.
  - Eligibility is currently available via a separate portal and will be integrated into CyberAccess© by January 2010. Pharmacy claims are adjudicated real time; all other claims may be filed electronically and will be real time in 2010.
- **DHSS**
  - DHSS currently has two programs that provide support for children with disabilities and cancer screenings that are required to pay claims.
  - Paid claims data is available via the Missouri Health Strategic Information Cooperative (MOHSAIC) system and eligibility is available electronically including the connectivity to look up Medicaid eligibility.
- **DMH**
  - DMH receives electronic eligibility data from DSS, and has incorporated that data into its DMH enterprise web-based system, Customer Information Management, Outcomes & Reporting (CIMOR). The CIMOR system also creates and sends claims to payers including Medicaid, Medicare and private insurance companies using HIPAA standard 837 transactions.

Electronic clinical laboratory ordering and results delivery

- **MO HealthNet**
  - Lab results for one major lab vendor are currently available electronically in CyberAccess© in PDF, digital availability.
  - Results from other lab vendors are scheduled for implementation January 2010.
- **DHSS**
  - DHSS receives lab results for public health reporting purposes (see next slide for additional detail).

Electronic clinical laboratory ordering and results delivery

- **MO HealthNet**
  - Vaccines paid for by MO HealthNet Division (MHD) are currently viewable.
  - Interface with DHSS immunization system is scheduled for January 2010.
  - Notifiable laboratory results are scheduled to be available in the 2nd quarter of 2010.
- **DHSS**
  - DHSS receives and reports on the data outlined below:
    - Electronic lab results: DHSS receives approximately 160,000 electronic lab results annually from 4 major laboratories for public health reporting of newborn genetic screenings, lead screenings, HIV/AIDS, STD's and various other communicable diseases.
    - Immunizations: DHSS currently receives 48% of immunization reports for the immunization registry via electronic communications
    - Surveillance reports: 80 Missouri hospitals report approximately 10,000 emergency room chief complaint reports and in-patient chief complaint reports daily to DHSS
    - Infections: Hospital acquired infection data is electronically received by DHSS
- **DMH**
  - DMH receives lab results from contracted laboratory services and incorporates those results into claims and consumer services data.

Quality reporting capabilities

- **MO HealthNet**
  - Peer profiling is scheduled for the 4th quarter of 2009. Risk level, gaps in care and divergence from best practices included. Limited care coordination information is currently available in Care Connection which is interoperable with CyberAccess©.
- **DHSS**
  - The immunizations registry currently includes a client recall feature to run reports on when immunizations are needed for follow-up on the client; Cancer screenings that are paid for by DHSS are reported to the Centers for Disease Control and Prevention (CDC) for review of patient follow-up and gaps in care.
- **DMH**
  - DMH has developed a comprehensive data warehouse from both legacy systems historic data and CIMOR data updates processed daily. This data is available for numerous automated and ad-hoc reports that are used by DMH and IT staff for quality assurance, management decision-making, and regulatory reporting requirements.
- **Primaris (Missouri's Medicare Quality Improvement Organization (QIO))**
  - DOQ-IT program
    - 8th Scope of Work under Medicare, Primaris assisted physician practices with evaluation of needs, vendor selection, contracting and process change management in adopting electronic health records (EHRs). Primaris then worked with these practices to facilitate submission of data from their EHRs for selected quality measures to the DOQ-IT Warehouse, a national repository where private healthcare data is stored for reporting purposes.
    - During the current 9th Scope of Work under Medicare, Primaris is building on these efforts on several fronts. Working with hospitals under the Patient Safety Theme, reporting is continuing on quality measures from the 8th SOW and moving into new areas of improvement such as surgical care, heart failure care and drug safety. Primaris is also working with these institutions to improve measures around rates of health care-associated methicillin-resistant Staphylococcus aureus (MRSA) infections and to reduce pressure ulcer rates.
  - Primaris is also working with physician offices in the 9th SOW to make effective use of their EHRs for quality improvement and reporting of quality measures. Under the Prevention Theme, practices with EHRs are using their data to initiate interventions encouraging improved compliance with preventive diagnostic testing around mammograms, influenza and pneumococcal vaccinations, and colorectal cancer screening. Missouri's Primaris was selected as one of eleven QIOs for a pilot project to implement system changes for people with chronic kidney disease (CKD) – utilizing quality measures and EHR involvement – to both improve patient care and reduce costly complications from the disease.
- **Kansas City Quality Improvement Consortium** (KQIC)
  - KCQIC has provided individual physician metrics to physicians since 2002, and will pursue metrics around cost and efficiency in the future.
  - The Kansas City Quality Improvement Consortium (KCQIC) collected responses from over 40,000 adult patients about their experiences with over 700 primary care physicians in the Greater Kansas City Area. KCQIC published the results of the survey in July 2009 and plans to begin reporting out on physician office and group level data in January 2010.

Prescription fill status and/or medication fill history

- **MO HealthNet**
  - A record of all prescriptions paid for by MHD is available today for all 850,000 participants as is the record of refills and a medication possession ratio (MPR) is available for chronic medications and is a surrogate of medication adherence. This tool is used by DMH to manage SMI therapies. This is a near real-time record, claims are visible within seconds of claim adjudication.
- **DMH**
  - DMH uses software from QuadraMed Corporation for handling prescription fills, medication inventory, and other pharmacy management activities. The contract for this software will expire 12/2010, so DMH is currently taking steps to prepare an RFP to purchase a replacement system by 1/2011.

Clinical summary exchange for care coordination and patient engagement

- **MO HealthNet**
  - Continuity of Care Document (CCD) Viewer scheduled for the fourth quarter 2009. Intake of HL7 home monitoring information scheduled for November 2009. Second phase to include electrocardiogram (ECG) wave/rhythm strips in August 2010; episodes of care in June 2010; and medication reconciliation and discharge summary exchange by September 2010.
- **DHSS**
  - DHSS has built into the Missouri Health Strategic Information Cooperative (MOHSAIC) system a Public Health Profile in which a person can be looked up and any information contained in MOHSAIC (lead screening, immunizations, newborn metabolic screening, newborn hearing screenings, etc.) is displayed on one page in order to look at gaps in care and for client follow-up.
- **DMH**
  - The DMH CIMOR system makes a set of consumer information available to all DMH service providers that helps support care coordination.
    - DMH provides limited data from CIMOR to MOHealthNet for services delivered to common consumers.
    - DMH also participated along with several other agencies to design a data warehouse to contain data from all agencies that provide services and supports to children. The children's data warehouse design, if funded and implemented, would serve as a valuable tool to all agencies in coordinating care provided to children.
  - One subset of the community mental health centers utilizing CyberAccess© is sharing clinical assessment data through CyberAccess© with its Federally Qualified Health Center (FQHC) partners in a project screening seriously mentally ill Medicaid patients for metabolic syndrome and integrating behavioral and physical health services.